

**NOTES**

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2 1/2" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 2 1/2" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 1/2" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE B LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED RELEASE STRENGTH. AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI.

ALL REINFORCING STEEL IN SIDEWALKS AND END POSTS SHALL BE EPOXY COATED.

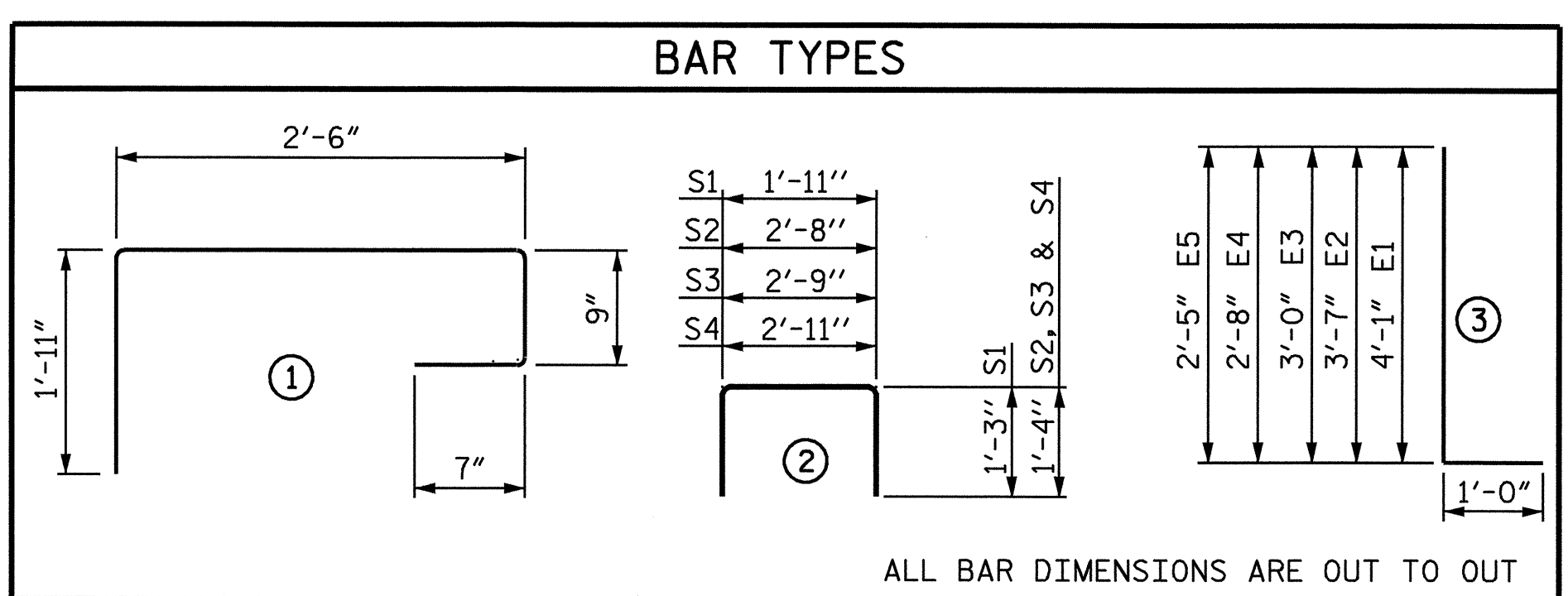
PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

CORED SLABS REQUIRED				
SPAN	TYPE	NUMBER	LENGTH	TOTAL LENGTH
		SPAN A	TYPE I	2
SPAN A	TYPE II	2	23'-8 1/4"	47'-4 1/2"
	TYPE III	15	23'-8 1/4"	355'-3 3/4"
SPAN B	TYPE I	2	49'-10 3/8"	99'-8 3/4"
	TYPE II	2	49'-10 3/8"	99'-8 3/4"
	TYPE III	15	49'-10 3/8"	747'-11 5/8"
SPAN C	TYPE I	2	23'-8 1/4"	47'-4 1/2"
	TYPE II	2	23'-8 1/4"	47'-4 1/2"
	TYPE III	15	23'-8 1/4"	355'-3 3/4"
TOTAL		57		1847'-6 5/8"



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE CORED SLAB SECTION SPAN A									
BAR	NUMBER	SIZE	TYPE	TYPE I UNIT		TYPE II UNIT		TYPE III UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	2	4	STR	23'-3"	31	23'-3"	31	23'-3"	31
S1	8	4	2	4'-5"	24	4'-5"	24	4'-5"	24
S2	42	4	2	5'-4"	150	5'-4"	150	5'-4"	150
S3	4	4	2	5'-5"	14	5'-5"	14	5'-5"	14
S4	4	4	2	5'-7"	15	5'-7"	15	5'-7"	15
*S5	6	4	1	5'-9"	23	5'-9"	23		
REINFORCING STEEL				234 LBS.		234 LBS.		234 LBS.	
*EPOXY COATED REINFORCING STEEL				23 LBS.		23 LBS.			
5,000 P.S.I. CONCRETE				3.6 CU. YDS.		3.6 CU. YDS.		3.6 CU. YDS.	
1/2" Ø L.R. STRANDS No.				12		12		12	

BILL OF MATERIAL FOR ONE CORED SLAB SECTION SPAN B									
BAR	NUMBER	SIZE	TYPE	TYPE I UNIT		TYPE II UNIT		TYPE III UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
B2	4	4	STR	26'-0"	69	26'-0"	69	26'-0"	69
S1	8	4	2	4'-5"	24	4'-5"	24	4'-5"	24
S2	94	4	2	5'-4"	335	5'-4"	335	5'-4"	335
S3	4	4	2	5'-5"	14	5'-5"	14	5'-5"	14
S4	4	4	2	5'-7"	15	5'-7"	15	5'-7"	15
*S5	9	4	1	5'-9"	35	5'-9"	35		
REINFORCING STEEL				457 LBS.		457 LBS.		457 LBS.	
*EPOXY COATED REINFORCING STEEL				35 LBS.		35 LBS.			
5,000 P.S.I. CONCRETE				7.3 CU. YDS.		7.3 CU. YDS.		7.3 CU. YDS.	
1/2" Ø L.R. STRANDS No.				24		24		24	

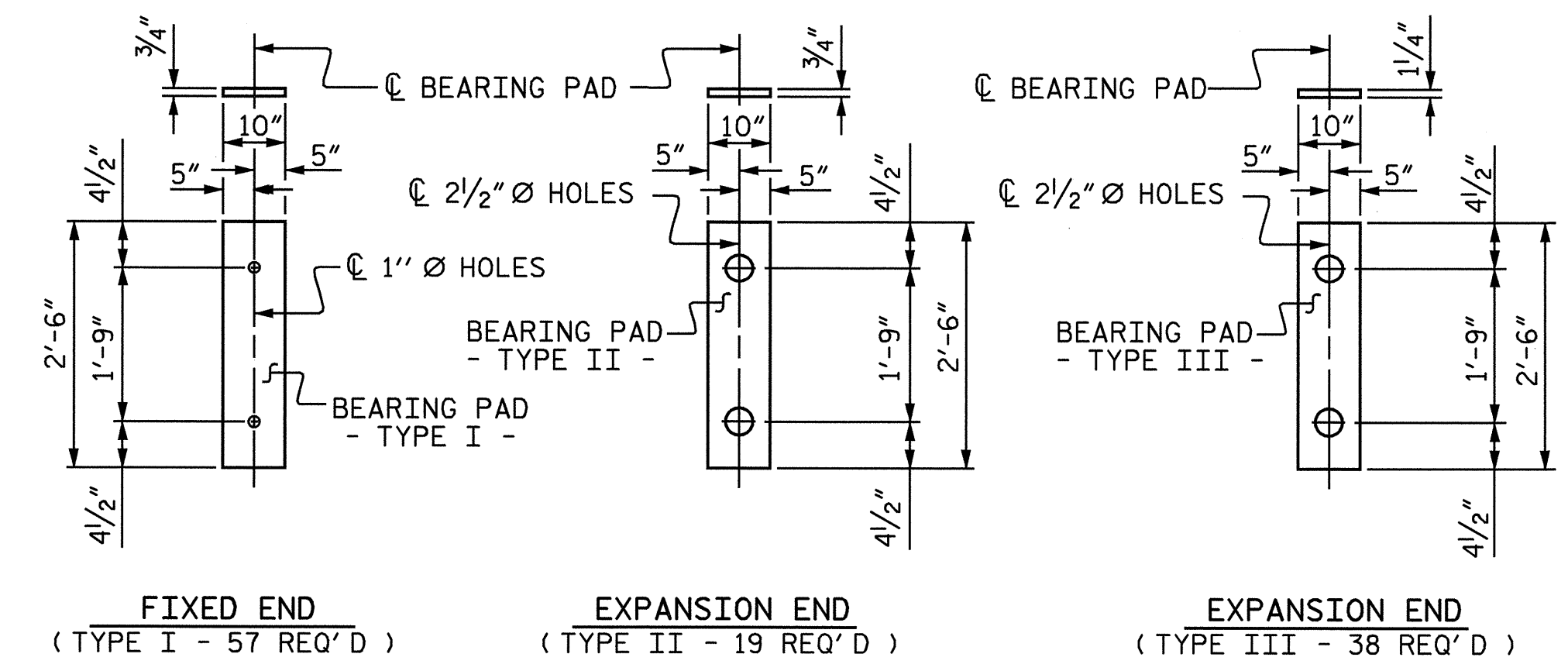
BILL OF MATERIAL FOR ONE CORED SLAB SECTION SPAN C									
BAR	NUMBER	SIZE	TYPE	TYPE I UNIT		TYPE II UNIT		TYPE III UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	2	4	STR	23'-3"	31	23'-3"	31	23'-3"	31
S1	8	4	2	4'-5"	24	4'-5"	24	4'-5"	24
S2	42	4	2	5'-4"	150	5'-4"	150	5'-4"	150
S3	4	4	2	5'-5"	14	5'-5"	14	5'-5"	14
S4	4	4	2	5'-7"	15	5'-7"	15	5'-7"	15
*S5	6	4	1	5'-9"	23	5'-9"	23		
REINFORCING STEEL				234 LBS.		234 LBS.		234 LBS.	
*EPOXY COATED REINFORCING STEEL				23 LBS.		23 LBS.			
5,000 P.S.I. CONCRETE				3.6 CU. YDS.		3.6 CU. YDS.		3.6 CU. YDS.	
1/2" Ø L.R. STRANDS No.				12		12		12	

BILL OF MATERIAL FOR SIDEWALK & END POSTS					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B3	24	4	STR	23'-3"	373
*B4	24	4	STR	26'-2"	420
*E1	8	7	3	5'-1"	83
*E2	8	7	3	4'-7"	75
*E3	8	7	3	4'-0"	65
*E4	8	7	3	3'-8"	60
*E5	4	7	3	3'-5"	28
*F1	8	6	STR	3'-6"	42
*F2	8	6	STR	3'-4"	40
*F3	4	6	STR	3'-8"	22
*F4	8	6	STR	3'-11"	47
*F5	4	6	STR	4'-3"	26
*G1	208	4	STR	5'-11"	822
*EPOXY COATED REINFORCING STEEL 2103 LBS.					
CLASS AA CONCRETE SIDEWALK 47.4 CU. YDS. END POSTS 1.8 CU. YDS.					
CLASS AA CONCRETE TOTAL 49.2 CU. YDS.					

DEAD LOAD DEFLECTION AND CAMBER			
	SPAN A	SPAN B	SPAN C
	1/2" Ø L.R. STRAND	1/2" Ø L.R. STRAND	1/2" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	↑ 3/8"	↑ 2 5/16"	↑ 3/8"
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	↓ 1/16"	↓ 1/4"	↓ 1/16"
FINAL CAMBER	↑ 5/16"	↑ 2 1/16"	↑ 5/16"

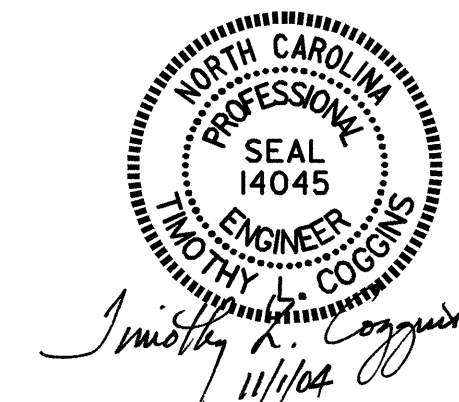
\*\* INCLUDES FUTURE WEARING SURFACE

GRADE 270 STRANDS	
AREA ( SQUARE INCHES )	1/2" Ø L.R. 0.153
ULTIMATE STRENGTH ( LBS. PER STRAND )	41,300
APPLIED PRESTRESS ( LBS. PER STRAND )	30,980



**ELASTOMERIC BEARING DETAILS**

ASSEMBLED BY : PEGGY ADKINS DATE : 8-03  
 CHECKED BY : T. AVERETTE DATE : 8-04  
 DRAWN BY : WJH 4/89 REV. 10/17/00 RWW/LES  
 CHECKED BY : FCJ 5/89 REV. 7/10/01 RWW/LES  
 REV. 5/7/03R RWW/JTE



PROJECT NO. B-3685  
PITT COUNTY  
 STATION: 17+47.50 -L-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
STANDARD 3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLAB UNIT					
OCTOBER 1981					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS 27